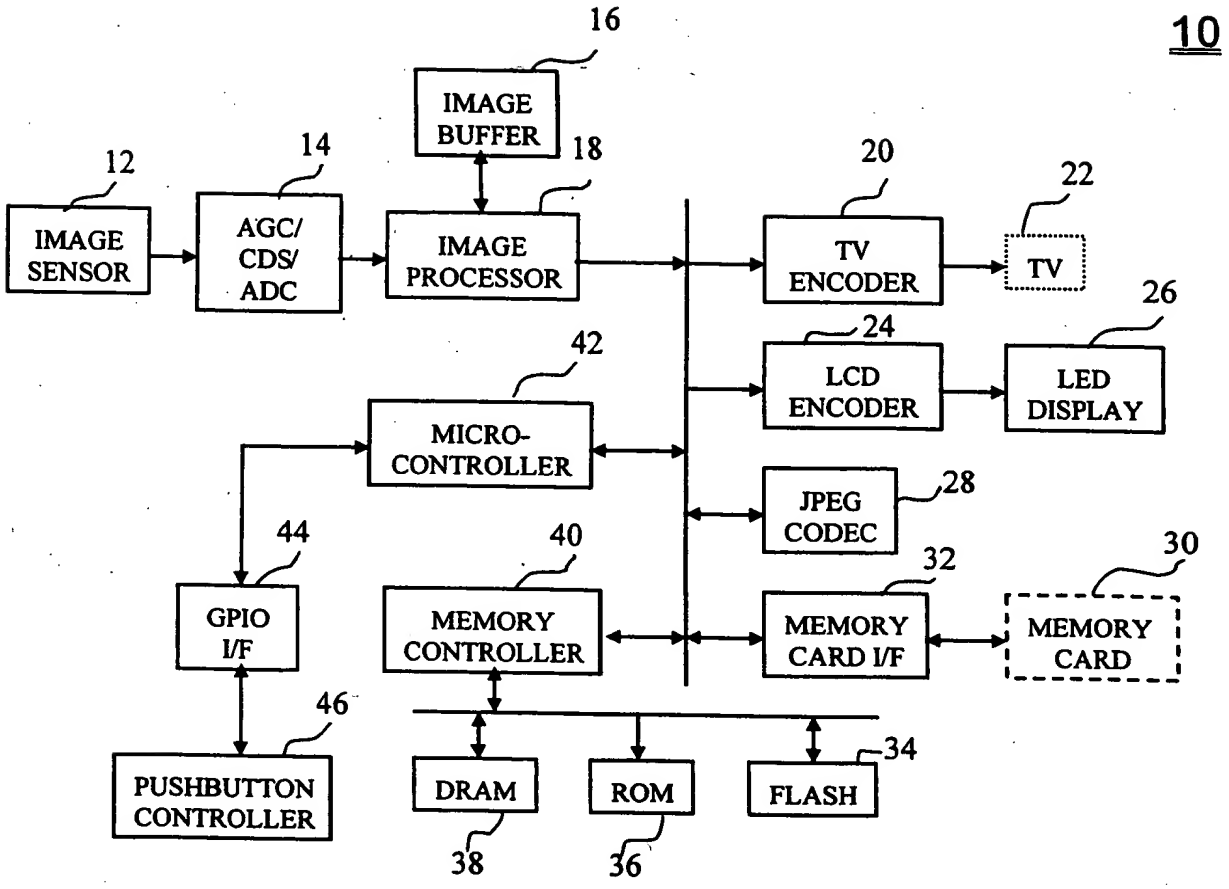

10
16
IMAGE BUFFER
12
IMAGE SENSOR
14
AGC/ CDS/ ADC
18
IMAGE PROCESSOR
20
TV ENCODER
22
TV
26
24
LCD ENCODER
LED DISPLAY
42
MICRO-CONTROLLER
JPEG CODEC
28
44
40
32
30
GPIO I/F
MEMORY CONTROLLER
MEMORY CARD I/F
MEMORY CARD
46
PUSHBUTTON CONTROLLER
DRAM
ROM
FLASH
34
38
36

Figure 1

R	G	R	G	R	G	R	G
G	B	G	B	G	B	G	B
R	G	R	G	R	G	R	G
G	B	G	B	G	B	G	B
R	G	R	G	R	G	R	G
G	B	G	B	G	B	G	B
R	G	R	G	R	G	R	G
G	B	G	B	G	B	G	B

Figure 2A

G	R	G	R	G	R	G	R
B	W	B	W	B	W	B	W
G	R	G	R	G	R	G	R
B	W	B	W	B	W	B	W
G	R	G	R	G	R	G	R
B	W	B	W	B	W	B	W
G	R	G	R	G	R	G	R
B	W	B	W	B	W	B	W

Figure 2B

Y	C	Y	C	Y	C	Y	C
M	W	M	W	M	W	M	W
Y	C	Y	C	Y	C	Y	C
M	W	M	W	M	W	M	W
Y	C	Y	C	Y	C	Y	C
M	W	M	W	M	W	M	W
Y	C	Y	C	Y	C	Y	C
M	W	M	W	M	W	M	W

Figure 2C

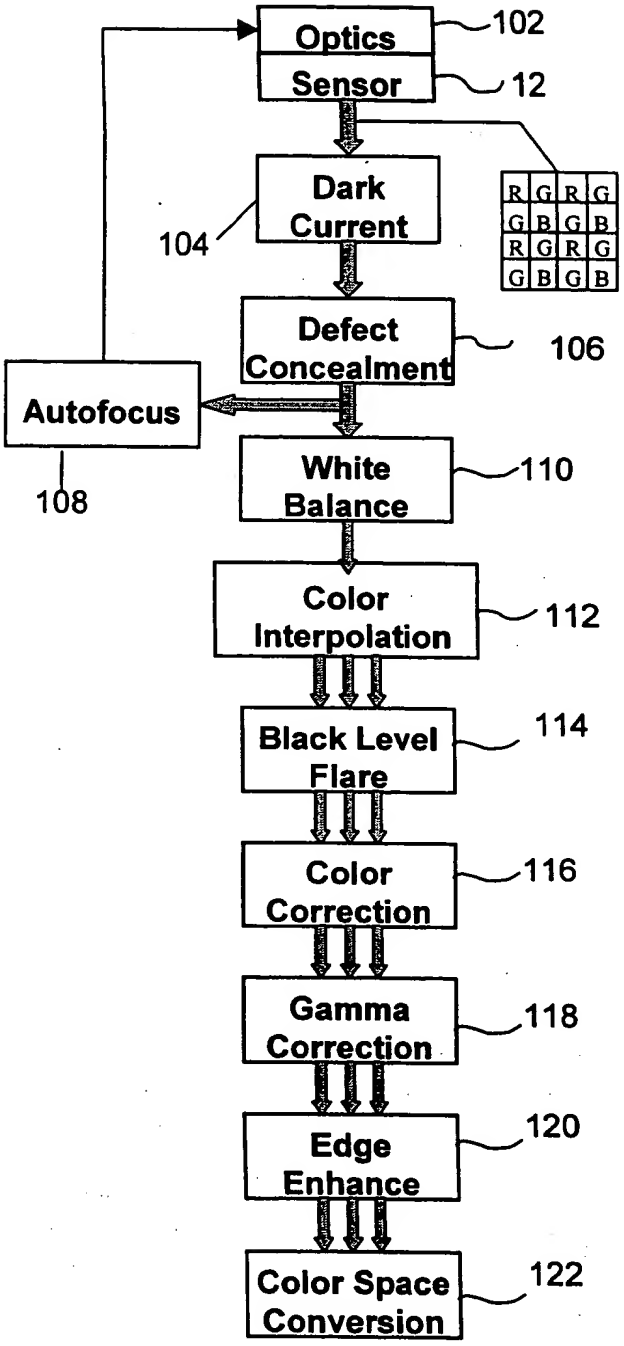


Figure 3

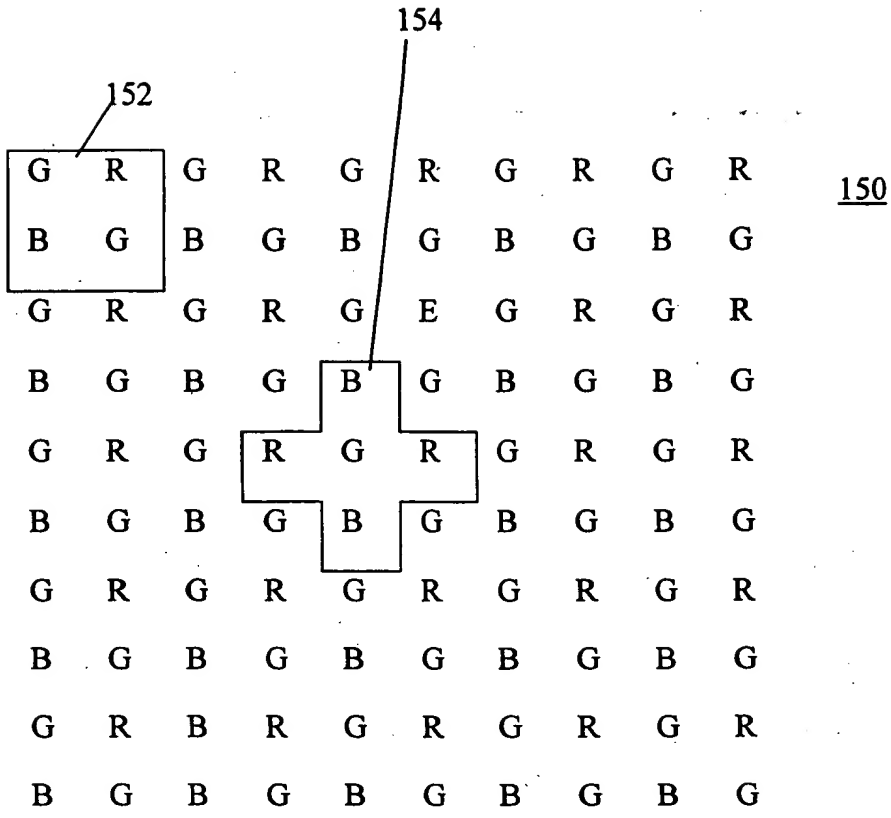

154
152
G R G R G R G R G R
B G B G B G B G B G
G R G R G E G R G R
B G B G B G B G B G
G R G R G R G R G R
B G B G B G B G B G
G R G R G R G R G R
B G B G B G B G B G
G R B R G R G R G R
B G B G B G B G B G
150

Figure 4

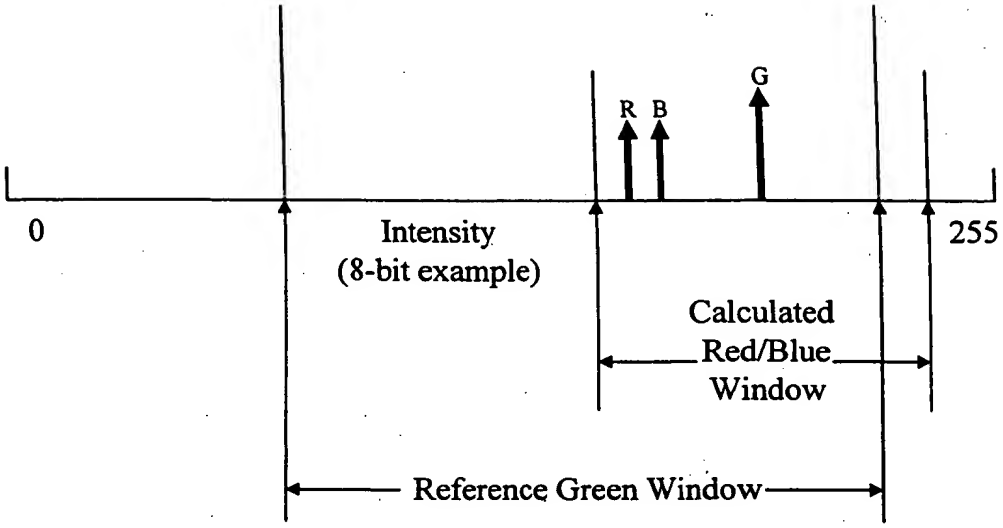

R
B
G
0
Intensity
(8-bit example)
255
Calculated
Red/Blue
Window
Reference Green Window

Figure 5

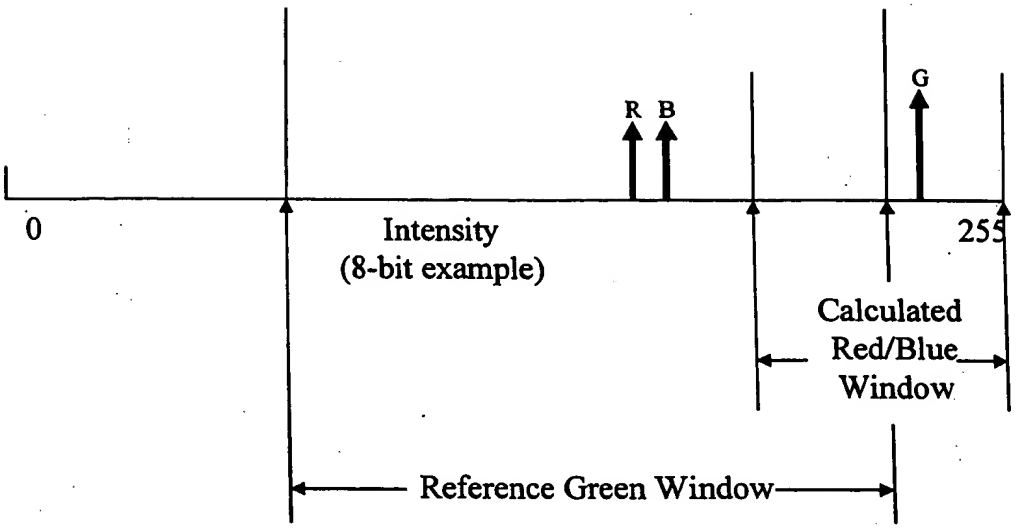

R
B
G
0
Intensity
(8-bit example)
255
Calculated
Red/Blue
Window
Reference Green Window

Figure 6

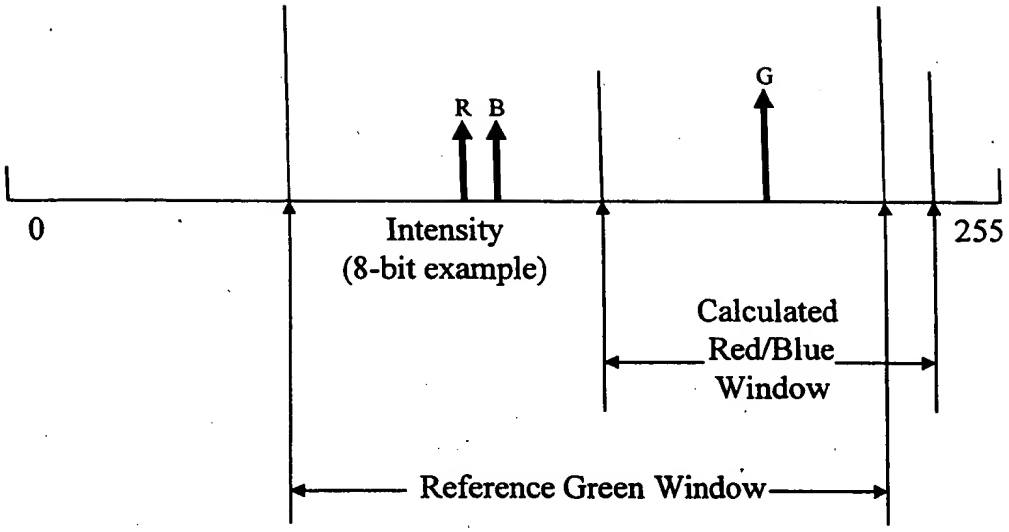

R B
G
0
Intensity
(8-bit example)
255
Calculated
Red/Blue
Window
Reference Green Window

Figure 7

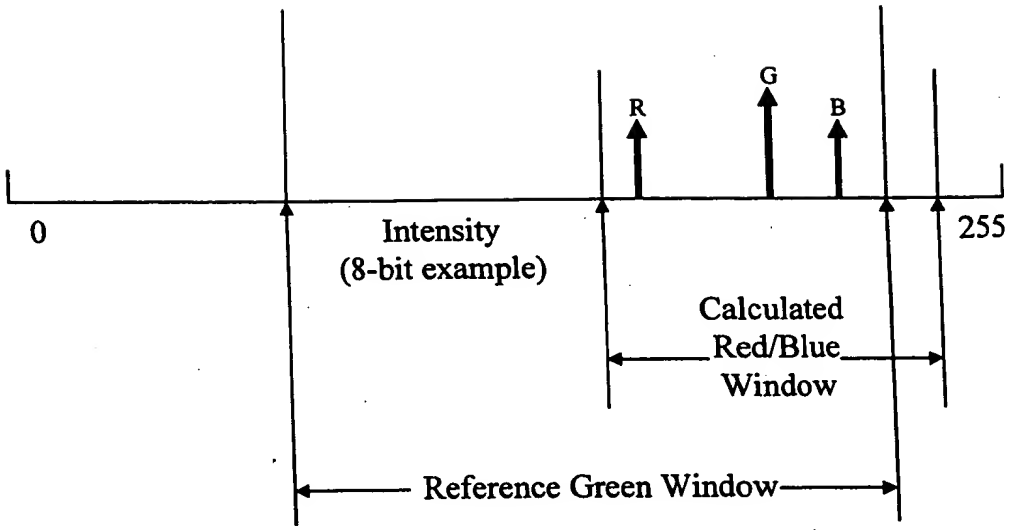
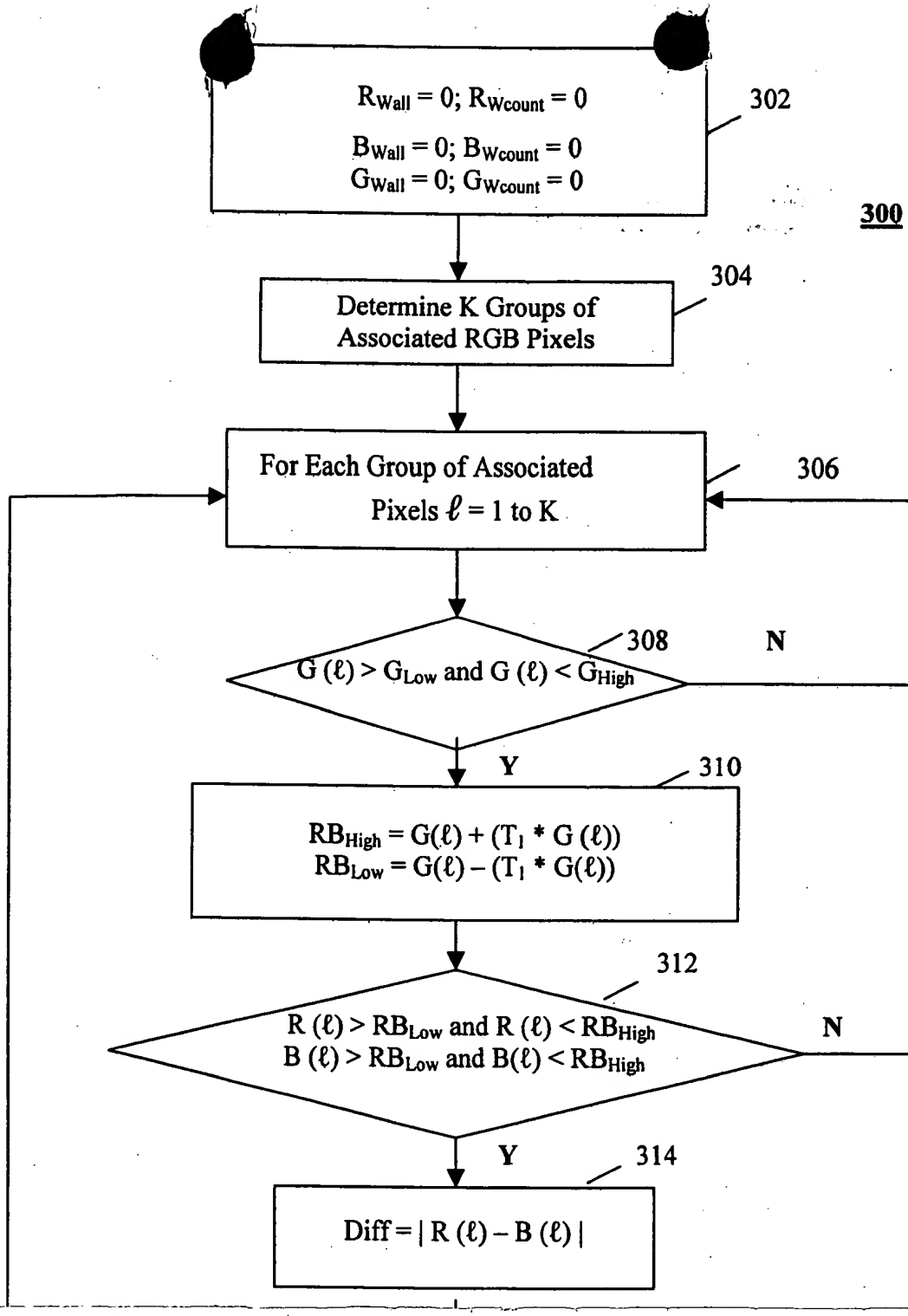

R
G
B
0
Intensity
(8-bit example)
255
Calculated
Red/Blue
Window
Reference Green Window

Figure 8


$R_{Wall} = 0$; $R_{Wcount} = 0$
$B_{Wall} = 0$; $B_{Wcount} = 0$
$G_{Wall} = 0$; $G_{Wcount} = 0$
302
300
Determine K Groups of Associated RGB Pixels
304
For Each Group of Associated Pixels $\ell = 1$ to K
306
$G(\ell) > G_{Low}$ and $G(\ell) < G_{High}$
308
N
Y
310
$RB_{High} = G(\ell) + (T_1 * G(\ell))$
$RB_{Low} = G(\ell) - (T_1 * G(\ell))$
312
$R(\ell) > RB_{Low}$ and $R(\ell) < RB_{High}$
$B(\ell) > RB_{Low}$ and $B(\ell) < RB_{High}$
N
Y
314
Diff = | R (ℓ) – B (ℓ) |

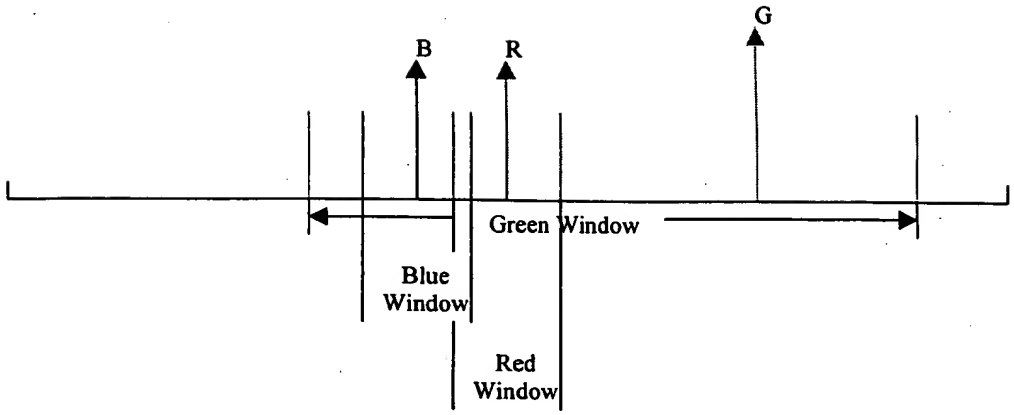


Figure 10

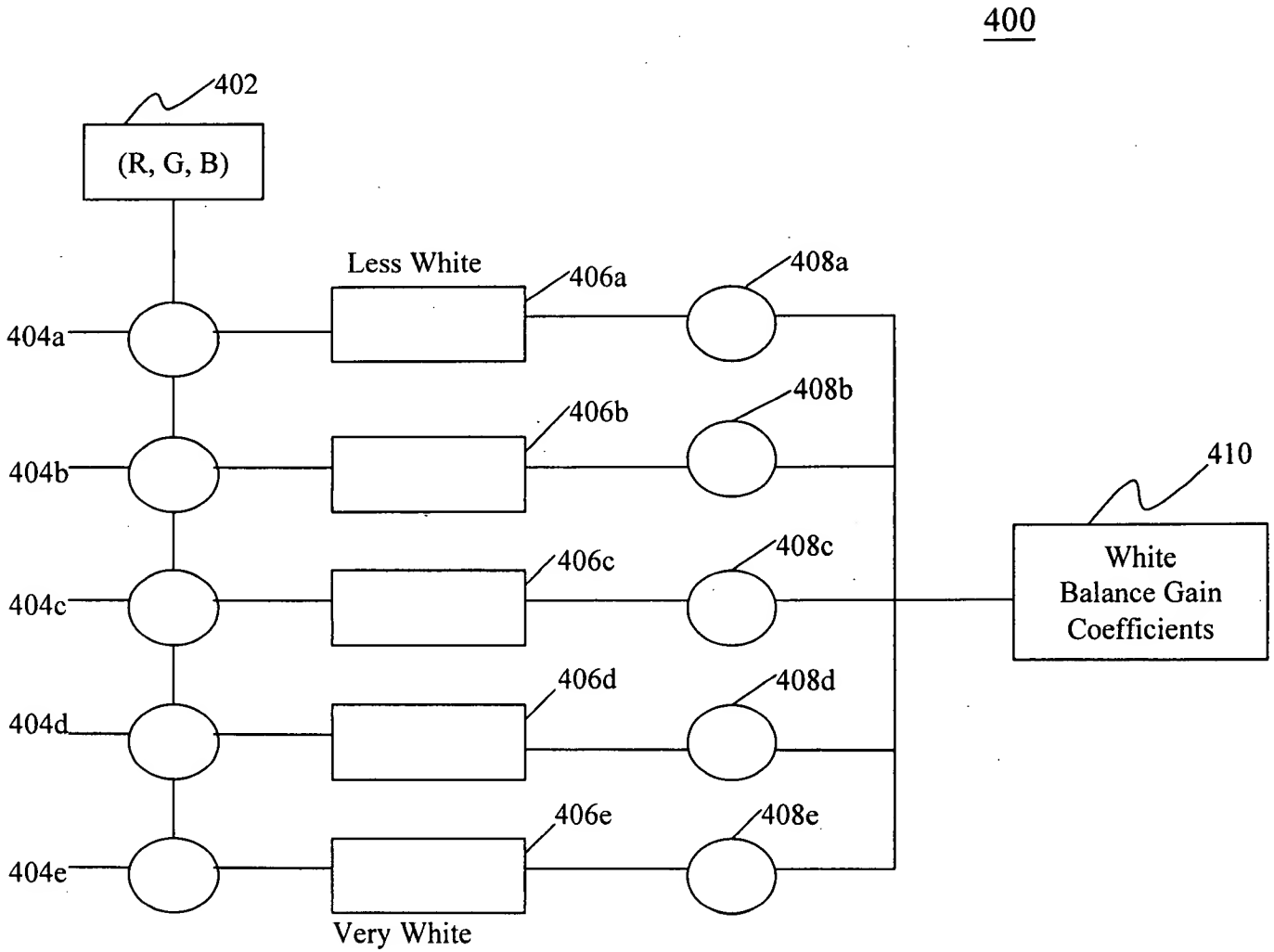

400
402
(R, G, B)
Less White
406a
408a
404a
406b
408b
404b
410
406c
408c
404c
White
Balance Gain
Coefficients
406d
408d
404d
406e
408e
404e
Very White

Figure 11